CLAIMS

What is claimed is:

1. A method for integrating a Wireless Local Area Network (WLAN) and a Wireless Wide Area Network (WWAN), the method comprising steps of:

sending a Service Request message from a terminal to an Access Point (AP);

starting a WLAN access procedure between the terminal and the AP;

sending a Remote Authentication Dial-In User Service (RADIUS) Request message from the AP to a WLAN Serving Node (WSN), the RADIUS Request message including terminal's credentials;

proxying at a RADIUS proxy capability of the WSN the RADIUS Request message;

authenticating the terminal at the WSN using the terminal's credentials; and

managing at the WSN access control for the terminal.

2. The method of claim 1, wherein the method further comprises steps of:

locating in the WWAN a Home-Authentication, Authorization, and Accounting (Home-AAA) server;

sending a RADIUS Request message from the WSN to H-AAA, the RADIUS Request message including the terminal's credentials;

authenticating the terminal at the Home-AAA; and

sending from the Home-AAA to the WSN a RADIUS Request message, the RADIUS Request message including a key information.

3. The method of claim 2, wherein the method further comprises steps of:

receiving the key information at the WSN; and

sending from the WSN to the AP a RADIUS Accept Response message, the RADIUS Accept Response message including a key information.

4. The method of claim 3, wherein the step of receiving comprises a step of generating a key at the WSN for encrypting and decrypting traffic of packet data between the WSN and the terminal.

5. The method of claim 1, wherein the step of starting further comprises steps of:

sending from the AP to the terminal an Extensible Authentication Protocol (EAP) Request message; and

receiving at the AP an EAP Response from the terminal.

6. The method of claim 5, wherein the step of receiving further comprises steps of:

granting access to the WLAN to the terminal; and

sending an EAP Success message from the AP to the terminal.

7. The method of claim 1, wherein the step of managing further comprises steps of:

starting counters in the WSN; and

sending accounting information from the WSN to the Home-AAA.

8. A Wireless Local Area Network Serving Node (WSN) for authenticating a terminal, the WSN being capable of:

receiving a Remote Authentication Dial-In User Service (RADIUS) Request message from an Access Point (AP), the RADIUS Request message including terminal's credentials;

proxying the RADIUS Request message at a RADIUS proxy capability;

authenticating the terminal using the terminal's credentials; and

managing charging operations for the terminal.

9. The WSN of claim 8, wherein the WSN is further capable of:

locating in the WWAN Home-Authentication, Authorization, and Accounting (Home-AAA) server; and

sending to the Home-AAA a RADIUS Request message, the RADIUS Request message including the terminal's credentials.

10. The WSN of claim 8, wherein the WSN is further capable of receiving from the Home-AAA a RADIUS Response message, the RADIUS Response message including a key information.

11. The WSN of claim 10, wherein the WSN is further capable of using the key information for generating a key for encrypting and decrypting traffic of packet data between the WSN and the terminal.

12. The WSN of claim 8, wherein the WSN is further capable of:

sending a RADIUS Response message to the AP, the RADIUS Response message, the RADIUS Response message including key information.

13. The WSN of claim 8, wherein the WSN is further capable of:

starting counters for accounting; and

sending accounting information to the H-AAA.